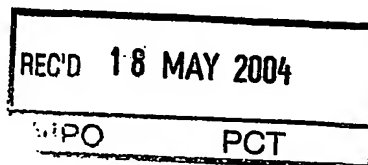


PCT/NZ2004/000065



## CERTIFICATE

BEST AVAILABLE COPY

This certificate is issued in support of an application for Patent registration in a country outside New Zealand pursuant to the Patents Act 1953 and the Regulations thereunder.

I hereby certify that annexed is a true copy of the Provisional Specification as filed on 2 April 2003 with an application for Letters Patent number 525159 made by F-TECHNOLOGIES LIMITED.

Dated 28 April 2004.

**PRIORITY DOCUMENT**  
SUBMITTED OR TRANSMITTED IN  
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Commissioner of Patents, Trade Marks and Designs



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PATENTS ACT 1953

PROVISIONAL SPECIFICATION

**METHODS AND SYSTEMS FOR MANAGING INSURANCE CLAIMS**

We, **F-TECHNOLOGIES LIMITED**, a New Zealand company of PO Box 5388, Mt Maunganui, New Zealand do hereby declare this invention to be described in the following statement:

This invention relates to methods and systems for managing insurance claims.

The processing steps of settling an insurance claim has to date generally been a largely manual and labour intensive task. Although various computer software programs have been implemented to assist the task of processing claims, they have generally been ad hoc developments and have only automated a few steps in the process from first handling a claim application to full settlement of the claim. Further, the use of additional consultative databases such as claims histories and property registers have not been considered or used.

A further step in the standard process of settling an insurance claim has been the use and reliance on a paper file. This requires a claims handler to write proper file notes and to record transactions and agreements. Unfortunately this reliance can sometimes be misplaced and claims handlers can either fail to record details making it difficult for other claims handlers to continue work on the file to complete a subsequent step if the previous person has retained information in their memory rather than recorded details.

Further, client histories in paper form can be difficult to access when held in one branch location and a claim making a subsequent claim has moved location and is claiming via a different branch. Standardisation of processing steps can also be difficult to achieve between various offices in an organisation where various business units do not know what the other units are doing.

It is an object of the invention to provide a method of and system for handling or managing claims that overcomes at least some of the abovementioned problems, or at least to provide the public with a useful choice.

According to a first broad aspect of the invention there is provided a method of managing an insurance claim including consulting an historical claims database to

check the claims history of the claimant to determine whether a pattern of claiming is evident.

According to a second broad aspect of the invention there is provided a method of managing an insurance claim, the method including the step of consulting a personal property database, the personal property database being configured and arranged to store a set of items for a plurality of clients or potential claimants, whereby should a claim be made by a client, the step would include selecting the property of the claimant, and to select the item or items being claimed.

It may well be expected that a property register or inventory will be created and periodically updated by the claimant or insurance company client before any relevant claim on the property is made to ensure accuracy of the set of items being stored.

Preferably the personal property register is accessible by authorised bodies such as the Police or Public Trust upon the loss of property or when the client is deceased and an assessment of the property of the client is being determined.

According to a third broad aspect of the invention there is provided a method of managing an insurance claim, the method including the steps of:

- a.) obtaining information on a claim, including items of property relating to said claim, such information forming a claim datafile;
- b.) consulting an historical claims database to check the claims history of the claimant, and when cleared;
- c.) obtaining information to establish a replacement value for each of the items of property relating to the claim, the information or data being part of a database kept current with replacement values of claimable items;
- d.) selecting a method of settlement of the claim; and

- e.) calculating the replacement values for each of the items of property to determine a settlement value.

When in step d.) the method of settlement of the claim is by cash settlement, desirably in step d. the settlement value is determined by applying a formula in the form of:

$$\text{settlement value} = \text{replacement value} - \frac{(\text{age of item} \times \text{replacement})}{\text{life expectancy value of item}}$$

When in step d. the method of settlement of the claim is by market value settlement, desirably in step e.) the settlement value or amount of each item is determined by seeking and obtaining an open market value from a valuer or third party.

When the method of settlement of the claim is by supply settlement, desirably in step e.) the settlement value is determined by selecting a retailer or supplier of the claimed item of property and placing an order for the supply of the item.

When in step d.) the method of settlement of the claim is by voucher settlement, desirably in step e.) the settlement value is determined by applying a depreciation rate to an initial monetary value, and by deducting any excess amount that may apply, and then the further step of generating a voucher for the settlement amount of the item.

Desirably the method includes the further step d.) of printing a set of documents finalising the claim, such documents importing relevant information and settlement values, and being dependant on the particular method of settlement applied.

Preferably step a.) may be conducted via a website over the internet, the website having a page configured and arranged to allow a claimant to enter the required information in various fields to complete an insurance claim and such data is exported to the insurance organisation's computer database managing the claim.

Desirably in step a.) a property register or inventory is consulted to select the property of the claimant, and to select the item or items being claimed. It is expected that the inventory of property will be created and updated by the claimant before any relevant claim on the property is made.

Advantageously the method includes the further step g.) wherein the datafile associated with a settled claim is moved to an archiving database wherein further changes to the datafile are not permitted.

According to a fourth broad aspect of the invention there is provided a computer controlled method for managing an insurance claim, the method including the processing steps of:

- i.) getting data relating to the claim, including details on all items of property being claimed, and consulting a personal property database to match details of the item of property with what is on record;
- ii.) consulting an historical claims database to match any claims being made with past claims of the claimant;
- iii.) obtaining data to establish a replacement value for each of the items of property relating to the claim, the replacement value being obtained from a price enquiry database kept current with the replacement values of items of property;
- iv.) adjusting the claim in accordance with a selected settlement method; and
- v.) determining a value in settlement of the claim.

Preferably in step iv) the claim adjustment is executed by a mathematical algorithm that includes a pre-determined depreciation rate or percentage for each item in the claim.

When in step iii) the settlement method is by cash settlement, desirably in step iv) the settlement value is determined by applying an algorithm in the form of:

$$\text{settlement value} = \text{replacement value} - \frac{(\text{age of item})}{\text{life expectancy value of item}} \times \text{replacement}$$

When in step iii) the settlement method is by market value settlement, desirably in step iv) the settlement value or amount of each item is determined by seeking and obtaining an open market valuation of the item by a valuer or third party.

When in step iii) the settlement method is by supply settlement, preferably in step iv). the settlement value is determined by selecting a retailer or supplier of the claimed item of property and placing an order for the supply of the item.

When in step iii) the settlement method is by voucher settlement, desirably in step iv). the settlement value is determined by applying a depreciation rate to an initial monetary value, and by deducting any excess amount that may apply, and then the further step of generating a voucher for the settlement amount of the item.

Preferably the computer program further includes step v.) of printing a set of documents finalising the claim, such documents importing relevant information and settlement values from steps i) and iii), and such documents being determined by the particular settlement method applied.

Desirably the system further comprises a client property database, the database storing lists of potential claimants property covered by an insurance policy, the database being updateable by any potential claimant.

Preferably the database can be consulted via a website, and wherein a security access code must first be used before access is permitted.

One non-limiting embodiment of the invention will now be illustrated, by way of example only, with reference to the accompanying drawings in which:

**Figure 1:** Shows a flow chart of steps of processing a claim;

- Figure 2:** Shows a second flow chart of steps of processing a claim;
- Figure 3:** Shows a flow chart of processing steps in the computer program; and
- Figure 4:** Shows a diagram of data flows between databases, registers and organisations.

Referring to figure 1, a flow chart of steps of processing a claim, generally referred to as 1, according to a broad aspect of the invention, is illustrated.

The purpose of the invention is to increase the efficiency of settling claims, particularly insurance claims, in a timely manner. For clarity, the embodiments of the invention described are with reference to insurance claims although it will be appreciated that the methods and systems employed in the invention are, *inter alia*, for determining the current value of an item of property.

The claims that are envisaged to be capable of being processed in accordance with any one or more aspects of the invention may include damage or loss to vehicle and boats and other such personal property, medical, travel, accident, income, life or house contents insurance or any other item of property or other thing or person that can be covered by an insurance policy and later be relied on to claim under such policy.

Although the use of computer software programs for managing insurance claims is not new, the various configurations and processing steps of the present invention, and how it is used in the insurance settlement process, and the extent of tracking and management of claims, and the methods of claim management, are considered to be some of the new aspects.



The method steps 1 involve at least one claims operator associated with an insurance company or organisation who can receive the details of the claim 2 and enter details into a database 4 associated with a CAPS computer program 3, referred to broadly as a claims adjuster program & systems ("CAPS"). Further details of desirable functioning steps of the CAPS program 3 are described below with reference to figures 2 and 3 and need not be repeated.

When the claimant provides details of a claim, the operator can immediately and conveniently load the data into a new claims datafile associated with the CAPS program 3 and a new datafile reference number, or claim reference, can be allocated. Alternatively a claim reference number may simply be selected and entered as a field in the CAPS program 3 loading step.

The information obtained from the claimant and loadable in the new datafile can include information such as, for example, the claimant's name(s), claimants physical address and/or postal address, claimant contact numbers, insurance claim reference number, type of claim (i.e. loss through theft or burglary, damage by accident), an event date being the date of the loss or damage to the item of property, insurance organisation and branch in the arrangement whereby outside parties may be reviewing and processing the claim datafile, policy type, policy excess if applicable, claim operator's name and title, and any other relevant information that may be useful or required with processing a claim.

When the data has been loaded into appropriate fields, the data can be saved by the operator as a current claims datafile. The datafile may be stored in a current claims database 4. It will be appreciated that further information on the items of property being claimed can be included in the data entered previously or as a separate step in the claim settling process. Other data that may be relevant to a claim could include a claims history for the claimant concerned, details of previous losses and lists of property assets held by a claimant and covered by various insurance policies.

It will be appreciated that an operator can load information or data relating to a claim in a variety of ways. One common way is by inserting the appropriate data by keyboard into fields on a loading screen displayed on a computer monitor. The display screen can be windows-based to conveniently display the data entered before the data is saved.

The operator can load data on the item(s) of property being claimed. The item(s) description, date of purchase and purchase price, in an appropriate currency, is entered. A group code for a category of property may be selected. This is useful when large numbers of items are being claimed and sub totals of the groupings can be provided to claimants on settlement rather than a large itemisation of property. This information or data is also saved to a database.

The replacement value of any item can be obtained by look up tables or other consultative sources such as a third party 5 (for example an assessor or valuer) or directly to a supplier of such items of property. Desirably the replacement value of any item is obtainable by sending a computer request command to a database, in the form of a replacement quote database or a Price Enquiry Database 6 ("PED"). The PED 6 is consulted with a request via network 7 and can respond by providing a replacement value of the item requested. The PED 6 is explained in some detail below and does not need to be repeated.

It will be appreciated various coding can be used to allow the CAPS program 3 and PED 6 programs to communicate, and that standard suitable communication systems can be employed to allow the programs to exchange data. Common communications systems include local area networks, wide area networks, direct telephone lines via modems, and/or a computer server hosting various databases and/or slave servers and the like, and communicating with client terminals by cable or abovementioned networks.

Information relating to some items may need to be obtained by a third party 5 such as an investigator, assessor or claims consultant. The claim details are provide to the

consultant 5 who determines the item value and provides that to the insurance organisation or claims operator or PED 6, as directed. The third party 5 may have a CAPS program 3 or part thereof loaded in a terminal and may communicate with the main CAPS program 3 at the insurance organisation and the PED 6. This method minimises any direct contact by telephone or email or otherwise and automatic pre-formatted requests can be generated and sent between parties without delay or distraction.

Once all the information is obtained, the next stage of the process can involve a claim adjustment step. This step in the claims settlement process is with adjusting the initial assessed replacement value of the item depending on factors, for example, as the type of policy covering the item being claimed, the age of the item and any applicable depreciation rates, and any other policy factors that determine the output value of this step in the process. The output value can be seen as the settlement value or amount of the item being claimed. The CAPS program 3 may comprise any one or more of the features as described with the CAPS program 53 with reference to figure 3 below.

It is envisaged that any claims operator at an insurance company or organisation may handle the claim processing steps so long as they have access to a CAPS program 3 and access to the database 4 or PED 6 hosting the relevant claims datafile.

The operator can make an appropriate adjustment to a claim or item in a claim to determine the settlement value. The settlement value may be determined by a mathematical calculation depending on the settlement type. This mathematical calculation may desirably include a depreciation ratio. The CAPS program 3 may allow a computer operator to adjust the depreciation ratio as required. This is particularly important for items that do not depreciate linearly over the life expectancy of the item. This adjusting step may be associated with the method of settlement employed such as cash settlement, supply settlement, voucher settlement and market value settlement. Each item in a claim can be settled individually. It is envisaged that in some instances items can be settled in groups or categories.

It may well be that the adjustment made to the initial value of an item does not include a depreciation ratio if the item in a claim is settled by supply settlement or voucher settlement. This may be because the item is being replaced rather than a monetary figure paid. The CAPS program 3 is preferably customised to comply with the insurance organisation's settlement policies, and any other factors.

With a cash settlement, the cash value is derived by taking into consideration factors such as the item's current replacement value, the depreciate rate applying to that particular item, whether linear or otherwise, the age of the item at the date of loss and the life expectancy of the item. These factors are entered into fields in the window of the CAPS program 3, and a step for deriving the settlement amount is obtained. The settlement amount may then deduct any excess applying to the final amount reimbursed. Desirably the program 3 includes a print option that when activated prints cash settlement pre-formatted documents.

With a supply settlement, a user can settle a claim by selecting a retailer or supplier of an item being claimed to supply a replacement item to the claimant and/or services. The services may include an authorisation of a reinstatement company or repairer proceeding with work in order to properly indemnify the claimant. To select a supplier the CAPS program 3 may include a drop down box having a table to select a preferred supplier. It will be appreciated that different insurance organisations may have a preference for some suppliers over others and such tables can be customised. The CAPS program 3 may allow a user to update a list of suppliers by adding or deleting suppliers.

The CAPS program 3 may include a quote option for items being claimed. With this option an operator can select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 3 and printed in a pre-formatted letter.

With the voucher settlement, items in a claim where the settlement amount may have been determined at the adjustment stage to derive a settlement amount or value on the item can then settle the claim by generating and sending a voucher to the claimant. The claimant can then take the voucher to suppliers that will accept the vouchers for items of property.

The voucher is derived by a user selecting the voucher option in the appropriate display screen. The user can then select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 3 and printed in a pre-formatted letter. The letter will record all the appropriate details of the claim including the item(s) settlement amount(s) and the supplier(s) the claimant can approach with the voucher.

With market value settlement, the market value is what one would expect to pay for a similar item on the open market based on factors such as, including age and condition. For example, the replacement value of a 5 year old bicycle is \$500, and the open market value is \$100. The difference reflects the age and condition of the bicycle, and can also include the market demand for a bicycle of that design and use.

The market value for the item can desirably be obtained by a registered valuer or third party that can provide the indemnity value of an item. This may be done with items such as jewellery.

Once the final figure is derived a print function can be used to provide the claimant with details of the item(s) being claimed and the settlement amount(s).

Advantageously the CAPS program 3 can include an interactive report function replied on to track progress with the claim and to record details of telephone calls and other correspondence and instructions relating to a claim file. It will be appreciated that in any organisation many operators may work in a claim at various stages, and it may well be the claim may be audited at any one stage of the claim

settlement process or a supervisor desiring to check that the file is in order before it is further processed, or archived after settlement of the claim.

The interactive report function can operate with a separate display screen or window having fields to record details. The fields may include the claim reference, insurance organisation, operator's identifier, claimant's name, and type of claim, with a large field for inserting text. Once the details are inserted the report is saved, and can later be retrieved from the datafile by executing a function to open the display window showing inputted details.

The status of a file can be changed when the claim is settled and fully processed, for example, from current to archived, depending on an insurance organisation's archive policy. It may be desirable to move datafiles on closed claims from an active and current database to an archived database 8 for convenience purposes.

Referring to figure 2, a flow chart of a second method of processing an insurance claim, generally referred to as 50, according to a further aspect of the invention, is illustrated.

This method 50 involves at least one claims operator associated with an insurance company or organisation 52 who can receive details of the lodged claim 51 and create or load a new claim datafile by using a CAPS program 53. A new datafile reference number, or claim reference, can be allocated. Alternatively a claim reference number may simply be selected and entered as a field in the CAPS program 53 loading step.

The information obtained from the claimant and loadable in the new datafile can include data such as, for example, the claimant's name(s), claimants physical address and/or postal address, claimant contact numbers, insurance claim reference number, type of claim (i.e. loss through theft or burglary, or damage by accident), an event date being the date of the loss or damage to the item of property, insurance organisation and branch in the arrangement whereby outside parties may be

reviewing and processing the claim datafile, policy type, policy excess if applicable, claim processing operator's name and title, and any other relevant information that may be useful or required with processing a claim.

When the data has been loaded into appropriate fields, the data is saved by the operator to a claims database 54. It will be appreciated that further information on the items of property being claimed can be included in the data entered previously or as a separate step in the claim settling process. The claims data is desirably associated with a search engine that can allow users of the CAPS program 53 to search for a claim datafile by any field, or more desirably by the name of a claimant, claim number, and/or by policy number.

It will be appreciated that an operator can load information or data relating to a claim in a variety of ways. One common way is by inserting the appropriate data by keyboard into fields on a loading screen displayed on a computer monitor. The display screen can be windows-based to conveniently display the data entered before the data is saved.

The operator loads data on the item(s) of property being claimed. The item(s) description, date of purchase and purchase price, in an appropriate currency, is entered. A group code for a category of property may be selected. This is useful when large numbers of items are being claimed and sub totals of the groupings can be provided to claimants on settlement rather than a large itemisation of property. This information or data is also saved to a database 54.

The replacement value of any item can be obtained by look up tables or other consultative sources such as a third party or directly to a supplier of such items of property. Desirably the replacement value of any item is obtainable by sending a computer request command to a second database in the form of a replacement quote or more accurately termed a price enquiry database 55 ("PED"). The PED 55 is consulted with a request via a communication means and will respond by providing

a value of the item requested. The PED 55 has been explained in some detail below and does not need to be repeated.

It will be appreciated various coding can be used to allow the CAPS 53 and PED 55 programs to communicate, and that standard suitable communication systems can be employed to allow the programs to exchange data. Common communications systems include local area networks, wide area networks, internet and cable links, radio frequency, telephone lines via modems, and/or a computer server hosting various databases and/or slave servers and the like, and communicating with client terminals by cable or abovementioned networks.

The value or information relating to some items can be obtained by a consultant 58 or third party such as an investigator, assessor or claims consultant. The claim details are provide to the consultant 58 who determines the item value and provides that to the insurance organisation or a separate claims management organisation ("CMO") 56, as required. Such third parties can be provided with a CAPS program 53 or associated program to enable such parties to communicate directly by data exchange rather than email attachments or manually to an insurance organisation 52 or CMO 56 or other party responsible for managing the relevant insurance claim.

The next stage is the settlement step. An item or items in a claim can be settled by a variety of methods. These methods may include cash settlement, supply settlement, voucher settlement and market value settlement. Each item in a claim can be settled individually. It is envisaged that in some instances items can be settled in groups or categories.

It may well be that the adjustment made to the initial value of an item does not include a depreciation ratio if the item in a claim is settled by supply settlement or voucher settlement. This may be because the item is being replaced rather than a monetary figure paid. The CAPS program 53 can be customised to comply with a particular insurance organisation's settlement policies, and the particular obligations an insurance organisation is contracted under a policy to meet.



With a cash settlement, the cash value is calculated for each item and the settlement amount is minus any excess that may apply to the final amount reimbursed. Further details are as applied to cash settlement as described with reference to figure 1. A print function 59 may be activated to print a settlement cheque. It is envisaged that if the claimant's bank account details are available a direct debit facility may be set up for payment.

With a supply settlement, a user can settle a claim by selecting a retailer or supplier of an item being claimed to supply a replacement item to the claimant. To select a supplier the CAPS program 53 may include a drop down box having a table to select a preferred supplier. It will be appreciated that different insurance organisations may have a preference for some suppliers over others and such tables can be customised. The CAPS program 53 may allow a user to update a list of suppliers by adding or deleting suppliers.

The CAPS program 53 may include a quote option for items being claimed. With this option an operator can select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 53 and printed in a pre-formatted letter.

With the voucher settlement, items in a claim where the settlement amount may have been determined at the adjustment stage to derive a settlement amount or value on the item can then settle the claim by generating and sending a voucher to the claimant. The voucher may be redeemable at any suitable supplier or retailer selected by the insurance organisation or otherwise. The claimant can then take the voucher to suppliers that will accept the vouchers for items of property.

The voucher is derived by a user selecting the voucher option in the appropriate display screen. The user can then select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 53 and printed in a pre-formatted letter. The letter will record all the

appropriate details of the claim including the item(s) settlement amount(s) and the supplier(s) the claimant can approach with the voucher.

With market value settlement, the market value is what one would expect to pay for a similar item on the open market based on factors such as, including age, condition and market demand of the item. That final figure may become the settlement amount or may be passed through another variable as required. Further details are as applied to market value settlement as described with reference to figure 1.

The next stage of the process can involve a claim adjustment step. This step in the claims settlement process is with adjusting the initial assessed replacement value of the item depending on factors, for example, as the type of policy covering the item being claimed, the age of the item and any applicable depreciation rates, and any other policy factors that determine the output value of this step in the process. The output value can be seen as the settlement value or amount of the item being claimed.

An operator at an insurance company or organisation 52 may handle this processing step or may desirably refer this processing step onto a CMO 56. If the CMO 56, a claims datafile can be exported via link 57 to the CMO 56.

The CMO 56 then makes an appropriate adjustment to a claim or item in a claim to determine the settlement value. The settlement value may be determined by a mathematical calculation. This mathematical calculation may desirably include a depreciation ratio that is supplied by the particular insurance organisation 52 responsible for settling a client's policy claim. The expected life expectancy of an item is a factor that may be included in the claim adjustment. The CAPS program 53 may allow a computer operator to adjust the depreciation ratio as required.

Once the final figure is derived a print function can be used to provide the claimant with details of the item(s) being claimed and the settlement amount(s).

Advantageously the CAPS program 53 can include an interactive report function relied on to track progress with the claim and to record details of telephone calls and other correspondence and instructions relating to a claim file. It will be appreciated that in any organisation many operators may work in a claim at various stages, and it may well be the claim may be audited at any one stage of the claim settlement process or simply a supervisor desiring to check that the file is in order before it is further processed or is archived.

The interactive report function can operate with a separate display screen or window having fields to record details. The fields may include the claim reference, insurance organisation, operator's identifier, claimant's name, and type of claim, with a large field for inserting text. Once the details are inserted the report is saved, and can later be retrieved from the datafile by executing a function to open the display window showing inputted details.

An advantage with the interactive report function is that an operator or user of the CAPS program, being able to obtain the claim datafile, can see everything on datafile at any location without requiring a paper file. This is a very desirable feature as it can save time and effort by not needing to request a file, and having to delay or wait to receive it, before further work can be progressed on the file. It also is convenient if a claimant contacts an insurance organisation wishing to discuss a claim or to query a claim, and a claims handler or other staff member may be able to assist with details on the file as it is readily retrievable or available.

The CAPS program 53 may incorporate a reinstatement function that allows for a re evaluation of reinstatement costs, after loss valuations for reinstatement claims either at full replacement or indemnity costs.

The datafile on a claim can be easily transferred or exported/imported to the CAPS program 53 as required. Further, the status of a file can be changed, for example, from open to closed, depending on an insurance organisation's archive policy. It

may be desirable to move datafiles on closed claims from an active and current database to an archived database for convenience purposes.

Referring to figure 3, a flow chart of broad processing steps in the CAPS computer program 53, is illustrated.

The CAPS program 53 functions to manage the various processing stages of handling or managing a claim to increase the likelihood of settlement of the claim reasonable quickly and efficiently, leaving an audit trail of transactions and correspondence at each stage of the workflow process.

A client may lodge an insurance claim with an insurance organisation 52 by conventional means such as by telephone helpdesk wherein the program 53 is run and a claims handler will create a new claim datafile 70. Conveniently a display screen on a computer monitor is opened and the claims handler will enter all the required information for lodging a claim. That information can be as detailed with reference to figure 2 and the information is generally determined by an insurance organisation's operational requirements for managing a claim, such as, for example, the claimant's name(s), claimants physical address and/or postal address, claimant contact numbers, insurance claim reference number, type of claim (i.e. loss through theft or burglary, damage by accident), an event date being the date of the loss or damage to the item of property, insurance organisation and branch in the arrangement whereby outside parties may be reviewing and processing the claim datafile, policy type, policy excess if applicable, claim processing operator's name and title, and any other relevant information that may be useful or required with processing a claim.

Alternatively, and more desirably, a client may lodge a claim on-line via a website page set up to accept relevant data relating to a claim. The website program can be configured to create a new claims datafile 70 or automatically export data inputted by a claimant to the CAPS program 53 at the insurance organisation 52 or where required.

The program 53 may function such that a datafile 70 can not be saved to a current claims database until all the necessary data or information is entered in the various fields in the claim loading display screen. The program 53 can include prompts and help files to assist a claims handler to obtain and enter all the required data or information.

Once the information is obtained, the claims handler can save the datafile to a current claims database, retrievable by the program as required.

The claim datafile is also generally associated with a current policy and policy details, relating to the items of property being claimed, can be imported or copied from a policy database 71 into the claims datafile, or a database reference or link can be saved as part of the database file. It will be appreciated that the settlement value is influenced by the policy covering the item being claimed, such as a market value or replacement cover.

If gaps in the information required for settling a claim is evident, such as the current replacement value of an item, then the program step 72 of obtaining such information is actioned. The action can be by way of querying a database 73 to obtain a value or quote of an item being claimed. This can be by simply clicking a button to send a request to the database 73. The database 73, upon receiving the request, can process the request and provide a value to the program 53 datafile of the item of property in question. When that item value is received, it can be loaded into the appropriate field in the claim datafile.

The program 53 allows for manual inputting of the value sought. This may be for a claim involving vehicle damage whereby a claims assessor must inspect the damage caused and to obtain a value of the damage to the vehicle and pass that onto the claims handler. It is envisaged that any outside third party may be provided with part or all of the CAPS program 53 to enable those parties to manage part of the claim electronically rather than via telephone calls and further manual input by a claims

handler at the insurance organisation. That is, the claims handler can send a data request for information or values from, say, an assessor, sent by email or otherwise, and the assessor will receive and action the request, and provide the information to the claims handler for inclusion in the relevant claim datafile.

Once the required information on a claim is received, the next processing step is with adjusting the item value. A method of settling the claim or items in a claim is selected. It could be by cash settlement 74, supply settlement 75, voucher settlement 76 and/or market value settlement 77 or a combination of these methods or otherwise (such as an agreed value between claimant and insurance organisation). Each item in a claim can be settled individually with whatever method is selected. It is envisaged that in some instances groups or categories of items can be settled.

With a cash settlement 74, the cash value is derived for an item. The cash value is derived by taking into consideration factors such as the item's current replacement value, the depreciate rate applying to that particular item, whether linear or otherwise, the age of the item at the date of loss and the life expectancy of the item. The life expectancy figure can be obtained from "look up" tables, and such tables may be incorporated in the CAPS program. These tables can desirably be upgraded and customised for different organisations using the CAPS program.

The computer program algorithm can also be customised for a particular insurance organisation and can, for example, include an assessment of the age of the item at the loss date, and a pre determined percentage of loss ratio per year for an item to derive at a settlement amount for the item, minus any excess that may apply to the final amount reimbursable. The CAPS program 53 allows variations in the calculation to be added such as varying depreciation percentages and how those percentages may change for each year of loss for any particular item. Maximum allowable depreciation rates used can be set using the CAPS program 53.

A mathematical algorithm used to drive the settlement value may be expressed as:

$$\text{Cash settlement value} = \text{replacement value} - \left( \frac{\text{age of item}}{\text{life expectancy of item}} \times \text{replacement value} \right)$$

An example is applied with using the above algorithm. If a three year old leather jacket is claimed, and it has a life expectancy of eight years, and is given a replacement value of \$450, the determined cash settlement value is:

$$\begin{aligned} \text{Cash settlement value} &= 450 - \left( \frac{3}{8} \times 450 \right) \\ &= \$281.25 \end{aligned}$$

Once the settlement figure is determined, the next processing step can desirably include a printing processing step 78. This step is to assist with the final stage of the claims process and is convenient as all the relevant data relating to a claim can be easily exported to pre-formatted letters and reports and memorandums or otherwise rather than a claims handler re-entering such data in a word processing program.

With supply settlement 75, a user can activate a pop up window of a table and select, or enter details of, a retailer or supplier of an item being claimed to supply a replacement item to the claimant and/or services. The services may include an authorisation of a reinstatement company or repairer proceeding with work in order to properly indemnify the claimant. It will be appreciated that different insurance organisations, or even different branches of an organisation, may have preferences for some suppliers over others and such tables can be customised. The CAPS program 53 may allow a claims handler or any authorised person, to update a list of suppliers by, for example, adding or deleting suppliers.

The CAPS program 53 may include a quote option for items being claimed. With this option an operator can select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 53 and printed in a pre-formatted letter in accordance with the supply settlement printing step 79. Suppliers include authorised repairers and reinstatement companies.

Alternatively the claims operator may choose to activate a sub-routine in the program 53 to directly order a replacement item to be delivered to the claimant from the supplier. Advantageously this order is placed digitally and may be communicated to the supplier having a CAPS program 53 or a part thereof of the program tailored to meet this direct ordering processing step. An advantage with this method is that it avoids printing an order form and sending by postal mail.

With the voucher settlement 76, items in a claim where the settlement amount may be determined by the purchase price of the item in the case where the item is covered by a replacement value in the relevant policy. The program 53 can then be used to settle the claim by generating and printing a voucher for the claimant in accordance with a printing step 80. The claimant can then take the voucher to specified suppliers that will accept the vouchers for items of property.

The voucher can be generated by a program user selecting the voucher option in the appropriate display screen. The user can then select a supplier and the appropriate information on the claim can be exported to a word processing program or sub program of the CAPS program 53 and printed in a pre-formatted letter. The letter will record all the appropriate details of the claim including the item(s) settlement amount(s) and the supplier(s) the claimant can approach with the voucher.

With market value settlement 77, the market value is what one would expect to pay for a similar item on the open market based on factors such as, including age, condition and market demand of the item. Such a value may be obtained by consulting the PED. That final figure may become the settlement amount or may be passed through another variable as required. Further details are as applied to market value settlement as described with reference to figure 1. Other mathematical calculations may be applied and values and figures insertable in fields on the display screen can be adjusted as required. That final figure may become the settlement amount or can be manually changed, if required.



Once the final settlement amount of the item is derived a printing step 81 function can be used to provide the claimant with details of the item(s) being claimed and the settlement amount(s) in a pre-formatted letter or table.

A print function 82 may be activated after any one of steps 78 to 81 are completed to print a settlement cheque. It is envisaged that if the claimant's bank account details are available a direct debit facility may be set up for payment.

When the claim has been completely actioned and any auditing of the datafile has been made, then the insurance organisation may direct that the claim be closed. At this stage the archive step can be actioned by the program by moving the current claims datafile from the database 73 to an archive database 83.

The archive processing step involves freezing the datafile and therefore no changes to any data can be subsequently made.

Additionally, at any stage of the claim management process, an operator can activate a pop up display window and enter a report 84. This is to allow tracking of activities on a claim datafile and recording of correspondences.

The CAPS program 53 can function to allow for a multitude of variables reflecting the myriad of claims management and settlement options available. That is why, for example, the settlement amounts or figures can be manually over ridden by an authorised claims handler who must exercise an appropriate level of judgement when settling claims.

It is envisaged that the program 53 can be easily adapted to include search and report functions, with printing options, involving a current working database and/or the closed archive database 84. The statistical analysis may desirably include reports such as the number of claims from a geographical location or certain demographic factor, claimant, claim types and yearly claim figures. Such reports are only limited

by the fields in the program and the amount of information obtained from claimants or otherwise, and entered into datafiles.

An advantage with the CAPS program 53 is that it is configured and functions to allow a particular insurance organisation to easily and conveniently export and import claim datafiles and interact with third parties outside the organisation or staff located at another branch of the organisation. The reliance on paper files can be avoided as all the file documentation or information can be readily available from a datafile viewable at any terminal or computer programmed with the CAPS program 53. Datafiles can be conveniently compressed or zipped and exported as an email attachment via the internet or by any other known communication means.

It is envisaged that when international currencies are involved with determining insurance claims, for example with a claim under travel insurance, the CAPS program 53 may include a feature having direct access to currency conversions, whether current or historic currency data, and may also include replacement quote values for foreign countries.

The CAPS program 53 can include a user's operating manual in the form of help files that can be dropped from the tool bar of a display window.

Referring to figures 1 to 3, it is seen that in various embodiments of the invention a replacement quote database, or more accurately termed, a Price Enquiry Database ("PED") has been consulted in the claim settlement process.

The PED includes current replacement values, market values and historic values of items. The PED has the advantage of being programmed and configured to provide current values for items of property being claimed. As PED can desirably be used in association with the CAPS program 53, and as PED can be consulted digitally, it is seen that a claims handler using the CAPS program 53 can settle a claim reasonably quickly by obtaining a reply to a request within a short time period.

The PED can be kept current with item values by an associated program set up to get information from various sources as required. The PED can be configured with a linked network of third parties that are consulted in the case of an unusual item not being present in the PED database. In this situation an assessor or valuer at a remote location can be provided with a program (not shown) that interacts and communicates with the PED and/or PED software program.

The assessor or valuer can obtain the replacement value of the item requested and sends it, desirably electronically, to the PED that immediately updates its database and actions a reply to the initial request for the replacement value. If the replacement value of that item is again requested at a later date by any insurance organisation or operator using a CAPS program 53, the PED can send the value immediately after locating it in its database.

The information that may be detailed in the PED include a category of item, a description of the item, the replacement value, a supplier of the item, and the date the database was updated with the replacement value of the item.

It will be appreciated that the computer program associated with the PED may include a searching function for items, a log of activities with time stamps, and any other known associated feature with a software program that can enhance its capabilities.

It is envisaged that the CAPS program 53 can be configured to integrate the PED to form a complete package. This package may be operational at any one location, particularly in the case of smaller applications of the program.

Referring now to figure 4, a block diagram of data flows between databases, registers and a selection of some relevant organisations, is illustrated.

It is considered that when a claim is being processed according to the CAPS program 100, one of the steps will include consulting an historical claims database 101 to

check the claims history of the claimant. The check may include determining whether the claimant has made a previous claim with any insurance organisation and/or to determine whether any one or more items being claimed have been previously claimed by the claimant. This check may have the advantage of determining whether a claimant may be fraudulently making a claim, or at least may raise a flag or alert sign to direct that an inspection of the claim and the claimant should be made.

The process may be carried out by forming a link via an insurance organisation 103 to an insurance claims register 104. The insurance claims register 104 may be a commonly linked register 104 from a plurality of insurance organisations (not shown) and/or including any other users of the CAPS program 100 that manages insurance claims or any other interested party such as an agent for any insurance organisation or claims management organisation 112.

Alternatively it is envisaged that the insurance claims register 104 may be incorporated in the processing steps of the CAPS program 100 and located on a server within one organisation rather than being located externally via an external link to a claims register 104, and that the insurance claims register 104 may be consulted by other parties.

A Price Enquiry Database ("PED") 102 may desirably be a part of the structure being consulted in a claim settlement process according to an aspect of the invention. As detailed with reference to figures 1 to 3, the PED 102 can include current replacement values, market values and historic values of items. The PED 102 has the advantage of being programmed and configured to provide current values for items of property being claimed. As PED can desirably be used in association with the CAPS program 100, and as PED 102 can be consulted as required.

The PED 102 can advantageously be kept current with item values by an associated program set up to get information from various sources as required. The PED 102 can be configured with a linked network of third parties that are consulted in the case

of an unusual item not being present in the PED database. In this situation an assessor or valuer at a remote location can be provided with a program (not shown) that interacts and communicates with the PED and/or PED software program.

The claims management method and system may also desirably include the creation, update and consultation of a personal property register or database 105 configured and arranged to store a plurality of clients personal property details. That is, for each client and potential claimant, all their personal property that may be covered by a claim at a future date, or for any other desirable reason such as, for example, property the subject of a deceased client's estate, may be stored electronically in a suitable format.

The data or information being held by the personal property database 105 may be in any form, and include images in any suitable format such as JPEG or TIF or otherwise. Such images of items of property or of any item of value to a client or customer 107 may be stored in a separate database 106 or be incorporated in the personal property database 105. Such images may be uploadable to the personal property database 105 by the client 107 or the client's agent 108 from time to time, and be downloadable or viewable by an insurance organisation at the time of a claim or for any other purposes.

The personal property database 105 may also include a facility to store scanned documents proving ownership of property, and other documents such as valuations, guarantees, serial number cards, and legal documents being stored elsewhere.

To obtain such photos or digital images a client or agent may initially set up an inventory of images, and then periodically update the inventory.

A client 107 or agent 108 may make an inventory of all their items of property. This form of inventory can desirably include private collections such as, for example only, stamps, coins, artworks, jewellery, antiques, and the like. By documenting such collections and loading lists of such collections, a client, and any relevant authorities,

would have easy and quick access to such inventories and collections for purposes other than settling an insurance claim such as a revision of values, re-appraising the worth of collections, for sales purposes at auctions, or otherwise. However, the main purpose may be for the reason of making an insurance claim quickly and easily when a collection or property has been lost or stolen and is subject to a claim.

Access to the inventories and the personal property database 105 may desirably be by authorised access only, and access is also envisaged and being allowable remotely via the internet or by any known and suitable communication means. A client 107, or a client's agent 108, may have access to the personal property database 105 to update the inventory of property, and such updates are envisaged as being useful to ensure accuracy of the inventories should a claim be made at any time.

The formatting of the inventories may be of any suitable form, and may desirably be in a form to allow for ease of additions and deletions, and general updates. Further, the format may preferably be arranged such that importing and exporting functionality is achieved. Further, the categories applied to the inventories of clients may be by type or value, by collection, by policy benefit, chronologically by age of each item, or by any other desirable type.

One advantage of the personal property database 105 is that it should increase the promptness of settlement of a claim.

It is envisaged that clients may customise their personal register by selecting the insurance organisation 103 they are insured with, enter an appropriate customer identification number, and provide information relating to a particular insurance policy, thus shifting items into appropriate insurance policies as required.

The personal property database 105 may be configured and arranged to automatically update the sum insured of the items of property being covered by a policy, and such update could be exported to the relevant insurance company covering the property. The client may also be automatically notified of any changes

of policy or with information affecting a policy covering property being listed on the personal property database 105. Any premium changes, including regular policies, can be desirably sent electronically to the client 107.

It is seen that the personal property database 105 may be utilised for moving or storage quotation purposes. Downloaded items of property can be viewable when running a CAPS program 100 that may be, for example, on an agent's laptop computer or by a shipping company 109 computer. It is envisaged that information flows between various organisations in figure 4 can be achieved for any desirable purpose with the inventories loaded on the personal property database 105.

The personal property database 105 may be consulted by government agencies 110 such as the Police and/or Public Trust. In the case of the Police, items of property claimed as stolen can be forwarded to the Police as required. The Public Trust organisation or other such estate management organisation can desirably use the inventories to assist in the assessment and valuation of estate property. This consultation process may advantageously save time by the creation of an permanent and accurate inventory that indicates when property was owned or in trust by the client 107.

Additionally, a retailer 111 may, at the point of sale with a client 107 present, or at any other suitable or convenient time, could ask the client 107 if they have a personal property inventory in the system as being described, and if so, the retailer 111 could update the client's property register or inventory with the item or items of property being purchased. This transaction could be in the form of a data file update being forwarded to the personal property database 105, and actioned accordingly. A copy of the update of the client's property inventory could be sent to the client 107 and/or the insurance organisation 103.

The personal property database 105 may further include a response unit (not shown) that enables a client 107 to communicate with the insurance organisation 103 at the time the client 107 enters information into the system. In this respect, the insurance

organisation 103 or a group of member organisations can potentially be in contact with any one client 107 and service various insurance requirements of the client 107.

It is envisaged that the personal property database 105 may be utilised at any time by any client 107 for a variety of purposes, not just to update the personal property inventory. The easy flow of information and communications between all parties involved in either a claim settlement transaction, or in the insurance business may be networked, and provided with suitable front end computer software programs, to participate in the system and methods of the invention.

The use of a website or series of linked websites, and the current use of the internet make this system not only viable but very practicable and efficient to all parties involved in insurance claims settlement and other business associated with insurance policies or covers.

Wherein the foregoing description reference has been made to integers or components having known equivalents then such equivalents are herein incorporated as if individually set forth.

Although this invention has been described by way of example of possible embodiments, it is to be appreciated that improvements and/or modifications may be made thereto without departing from the scope of the present invention.

**F-TECHNOLOGIES LIMITED**

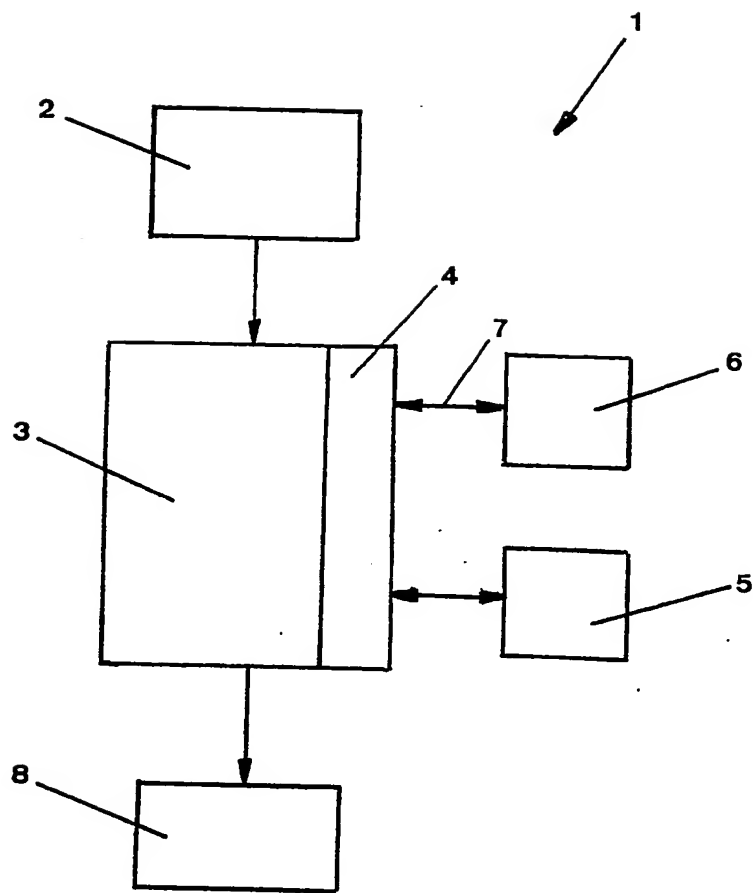
By their attorneys

**SCHUCH & COMPANY**

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**Figure 1**



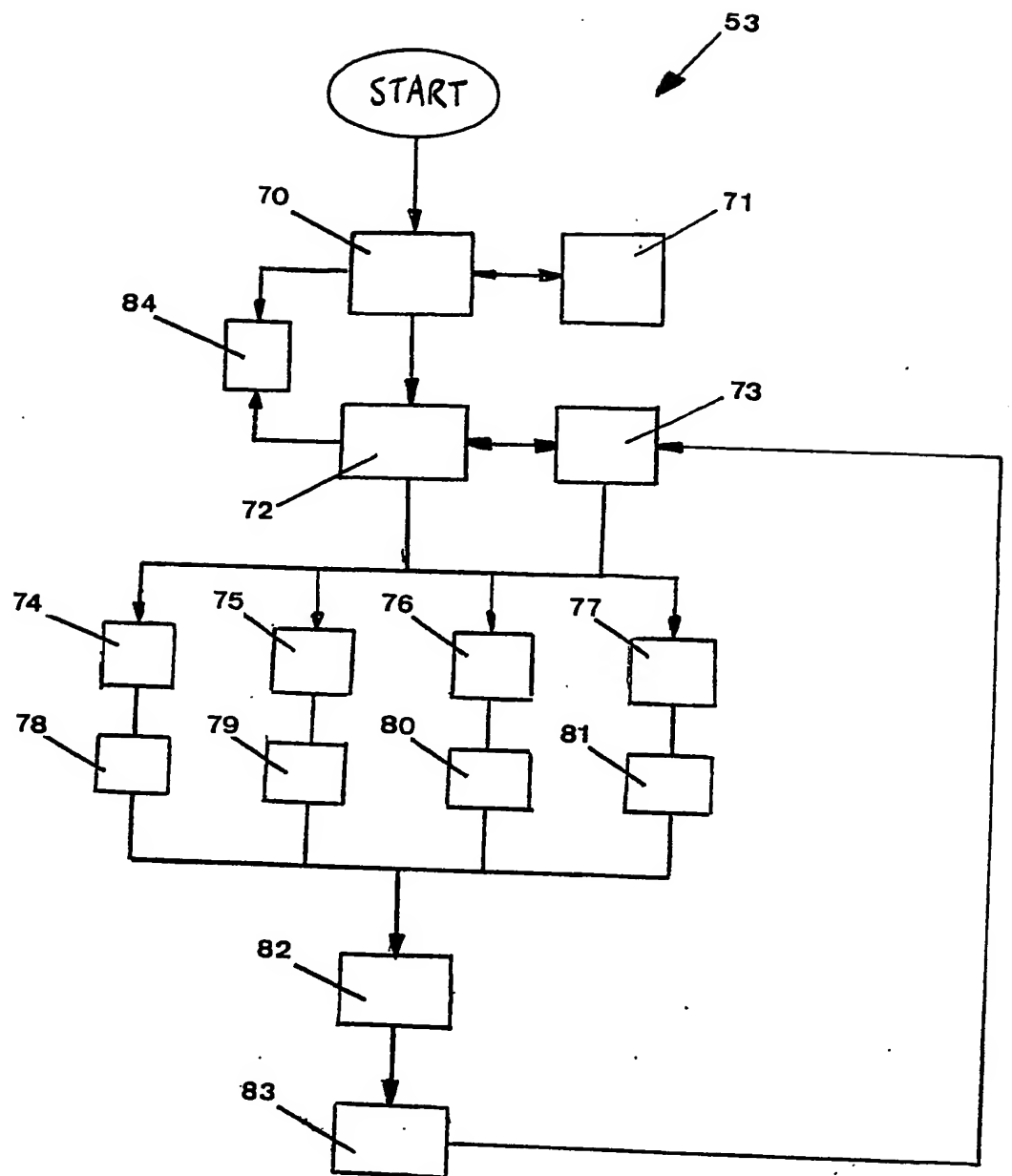
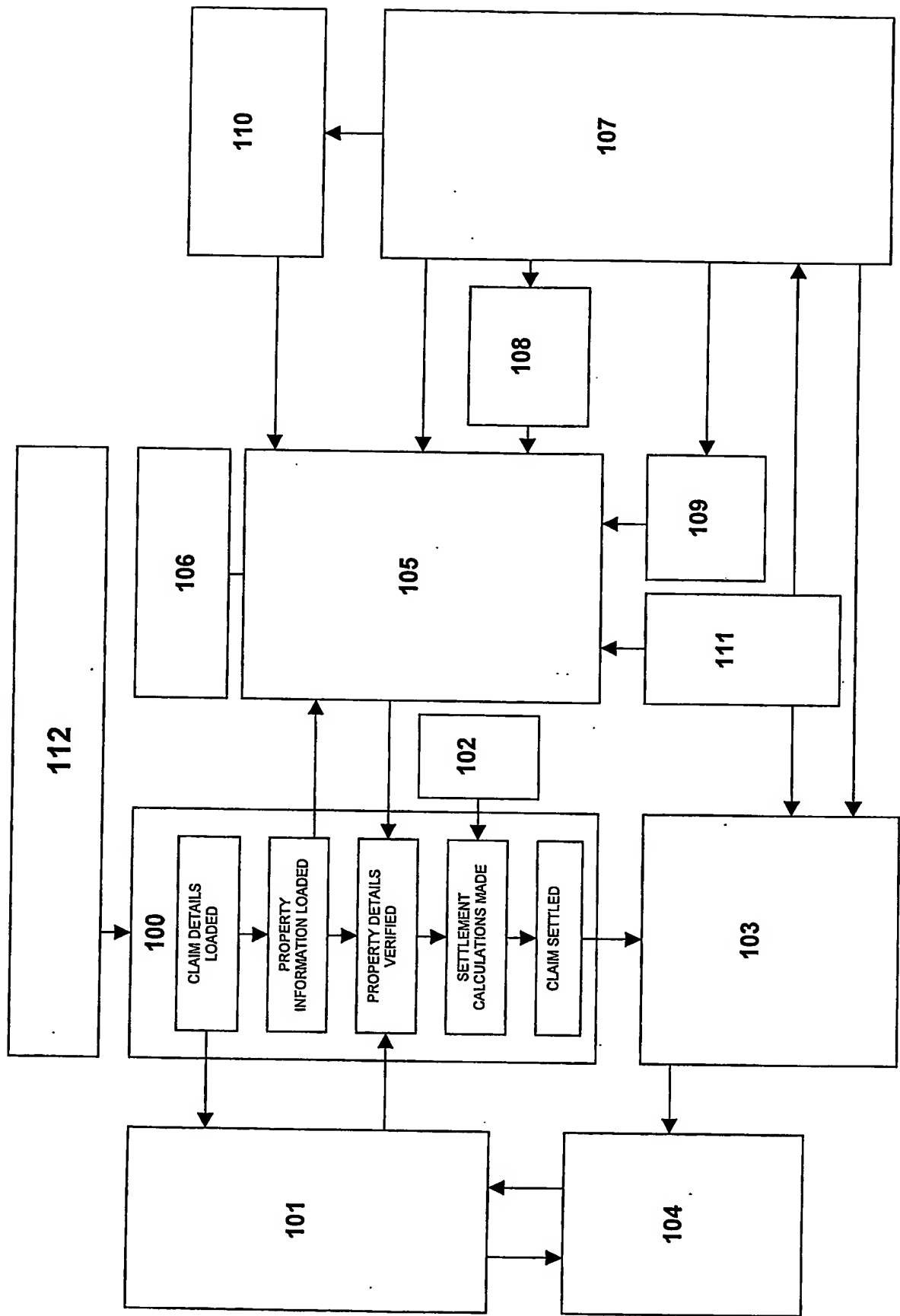


Figure 3

Figure 4



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